

# Nature in the City

## The Garden that an EE Partnership Built

By Karen Leggett

**Longstreth Elementary School teacher Chuck Lafferty, who grew up near Pennsylvania's Tinicum Marsh, now has a kindergarten classroom full of bugs and reptiles. It's all part of making the marsh and nearby John Heinz National Wildlife Refuge at Tinicum key parts of his kindergarten curriculum at the inner-city school where one father says most kids don't have anything to do with nature.**

Central to Lafferty's curriculum is a pollinator garden at the refuge, which the students started and maintain. Lafferty calls the connection between the children and the refuge "a shining example of what is possible when a group of dedicated and devoted people get together." Refuge manager Gary Stolz agrees on the importance of partnering with "teachers who have the spark. Then help them get the materials they need any way they can. You need shared ownership in these projects."

In addition to the school and the refuge, others involved in the partnership have included the Refuge Friends organization, the Pennsylvania Horticultural Society, National Fish and Wildlife Foundation, Penn State University Master Gardeners and Project BudBurst. For example, Longstreth Elementary School had a partnership with the Pennsylvania Horticultural Society, which donated soil for a vegetable garden at the school that was used for native plants beds on the refuge.

It all started in 2000 in a vacant lot next to a Longstreth School annex, which Lafferty's students turned into a schoolyard habitat with \$122 they had collected – in pennies. In 2001, the

school received a Sea World Busch Gardens environmental award for the garden and that same year, Lafferty met Jean Diehl of the Friends of Heinz Refuge. The Friends offered to sell organic seeds from the schoolyard habitat and return half of the profits to the school's other environmental education programs.

### Humanity for Habitat

Lafferty, who joined the Friends board, jumped at Diehl's suggestion that the Friends apply for a Nature of Learning grant from the National Fish and Wildlife Foundation so Longstreth Elementary students could construct a pollinator garden at John Heinz Refuge. The grant, awarded in late 2010, provided funds to purchase more than 2,000 native plants, nurtured in beds at Longstreth Elementary and transplanted to the refuge.

Pennsylvania is currently developing statewide standards for outdoor education. Lafferty says Longstreth Elementary will

be one of the few schools with its own place to meet standards without leaving school grounds. Native plants grown in the Longstreth Elementary beds will be made available to other schools in Philadelphia.

The children came to the refuge in February 2011 to begin working on the project. They cleared everything out of an original habitat garden. "We had 30 kids and eight parents, including six dads," remembers Lafferty.

The native plants from the habitat garden on the refuge were taken back to the Longstreth Elementary Native Plant Nursery, where kindergarteners and their sixth-grade habitat buddies cared for them over the winter. Everything else went into a compost pile. On the second visit, raised beds were built to hold the composted soil. Parents, volunteers, Friends and refuge staff provided a three to one ratio of adults to kids. Even kindergarteners were proudly wielding their own shovels and rakes.

The Friends paid for bus transportation for six field trips and project t-shirts. Five-year-old Shanice Gonzalez drew

*Children carried soil to the raised beds in buckets.*

*Weeds and old plants went into a compost bin which later provided soil to fill the raised beds of the pollinator garden.*



Sixth-graders produced a brochure on the benefits of using native plants in home gardening.



Friends of Heinz Refuge

# Native Plant Pollinator Garden

A Partnership Between  
Friends of Heinz Refuge &  
Longstreth Elementary School



## Learning from the Pollinators Longstreth Elementary School



**der:** When I was at the garden, about how there are a lot of kinds of insects that were in the night working in the garden was boring but it was so fun helping gardeners and watching them do selves.

**der:** I learned that nature is very Our nature walk was nice. We sting plants and animals that we o see every day. It turns out I love

**der:** Native plants will give us play where we can become aware ide world without teachers and

**der:** Gardens allow us to explore he worms and bugs, the feel of the ne changes in the plants. We can't t information from the classroom.

**der:** Kids should plant native ause they are use to the local his means the plants don't die eather is hot, cold, rainy, humid

## Native Pl Providing Foo

### Common Nai

- Serviceberry
- Wild Columbine
- Common Milkweed
- Butterfly Weed
- Whorled Milkweed
- Smooth Aster
- New England Aste
- Aromatic Aster
- Creek Sedge
- Oak Sedge
- New Jersey Tea
- Redosier Dogwood
- Joe Pye Weed
- Hyssopleaf Thoro
- Boneset
- Common Sneezey
- Ox-eye
- Blue Flag Iris
- Spice Bush
- Cardinal Flower
- Great Blue Lobelia
- Blue Lupine
- Beebalm
- Wild Bergamot
- Evening Primrose
- Tall White Beardto
- Carolina Rose
- Sweet Azalea
- Eastern Coneflow
- Three-lobed Cone
- Elderberry
- Little Bluestem
- Wrinkle-leaf Golde
- Highbush Blueber
- Arrowwood Viburn
- Blackhaw Viburnu
- Nannyberry Viburr

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USFWS

*Kindergarteners were accompanied on each trip to the refuge by a class of sixth-graders. Everyone had work to do in the garden.*



USFWS

*Longstreth Elementary School teacher Chuck Lafferty gathers children for an impromptu lesson on the refuge.*

**“Refuges are often isolated islands of habitat,” says Gary Stolz. “By encouraging and helping create schoolyard and backyard habitat partnerships, with pollinator gardens on refuges as models, we can help restore fragmented wildlife corridors beyond refuge boundaries for the benefit of all Americans.”**

the winning design for the bright yellow shirts adorned with the phrase, Humanity for Habitat. “This project brings a smile to every face. It generates good will and a spirit of togetherness,” says Lafferty.

By spring, children were carrying soil to the raised beds in buckets, calling themselves “ants” as they formed a steady line between the mound of composted soil and the planting beds. Every time a youngster discovered a worm, snail or caterpillar, there was an excited announcement and all work stopped until a safe new home could be found. “Not one of them would squash a bug or deliberately harm any living creature,” wrote the Friends in their project report to the National Fish and Wildlife Foundation.

“With each visit, students became more eager to see how the garden was doing, how their plants looked and what pollinators were visiting the garden,” noted John Heinz Refuge ranger Mariana Bergerson. “There were also many unplanned teaching moments such as when the students assembled to take a picture and one little girl proclaimed, ‘I just sat on a turtle!’”

Kindergarteners were accompanied on each trip to the refuge by a class of sixth-graders. During each three-hour field trip, children split their time evenly between working in the garden and taking a guided walk. Lafferty uses lessons both in the classroom and on the refuge from the U.S. Fish and Wildlife Service Schoolyard Habitat Project Guide and the National Wildlife Federation’s Access Nature program.

Sixth-graders produced a brochure on the benefits of using native plants in home gardening. They also met a school requirement to complete a 20-hour service learning project.

On June 7, 2011, kindergarteners and sixth-graders put finishing touches on the garden as well as a small pond for wetland vegetation and fish. Students set landscaping rocks around the perimeter before celebrating with lunch and an award ceremony. A state legislator invited to the ceremony later invited refuge manager Gary Stolz to talk about the refuge on his radio program.

#### **What’s Next?**

Lafferty is now teaching first-grade, so about half the youngsters from his kindergarten class will continue going with him to the refuge. Lafferty’s students also will be collecting information for Project BudBurst, a citizen science phenology project through the

Cornell Lab of Ornithology. Lafferty will also conduct teacher workshops at Longstreth based on Access Nature and the Habitat Project Guide.

The pollinator garden is already having an impact on the refuge and the community. The Pennsylvania Horticultural Society honored the refuge and its pollinator garden with the 2011 Community Greening Award. Diehl, for whom the garden is the culmination of a 30-year dream, says “the garden has proved to be a magnet for guided butterfly and wildflower walks during the refuge’s annual Cradle of Birding Celebration. Kindergarten children have bonded with their natural world – a lesson that will not soon be forgotten.”

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